

RCA VICTOR MODEL 56X

TRADE NAME RCA Victor, Models 56X, 56X2, 56X3 (Chassis RC-1011)
MANUFACTURER Radio Corp. of America, RCA Victor Division - Camden, New Jersey
TYPE SET AC - DC Superheterodyne - Self Contained Loop Antenna
TUBES (SIX) Types 12SG7 Converter, 12J5GT Osc., 12SK7 IF Amp., 12SQ7 2nd Det.-AVC-AF, 35L6GT Power Output, 35Z5GT Rectifier

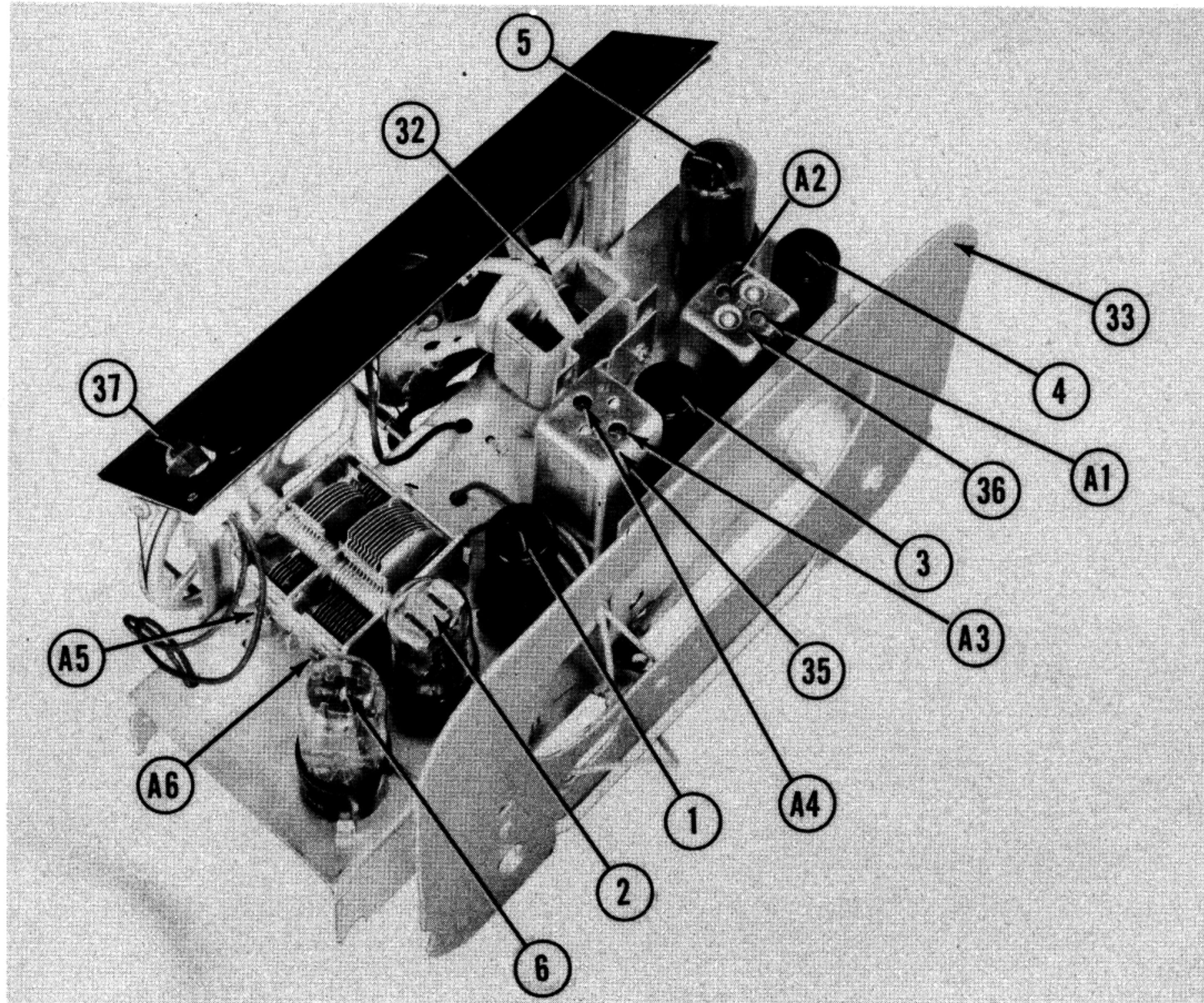
POWER SUPPLY 117 Volts AC-DC Rating .240 Amp. @ 117 Volts AC
TUNING RANGE-BROADCAST 540-1600KC **SHORT WAVE**

ALIGNMENT INSTRUCTIONS						
DUMMY ANTENNA *	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.01MFD	High side to stator of rear section of gang. Low side to B-.	455KC	Quiet point at 1600KC end of dial.	Across voice coil.	A1,A2, A3,A4	Adjust for maximum output. Use isolation transformer if available. If not, isolating capacitor must be connected between signal generator ground lead and B-. Also decrease dummy ant. to .001MFD to prevent excessive hum modulation.
200MMFD	High side to ant. lead. Low to B-.	1300KC	1300KC	"	A5	Adjust for maximum output.
"	" "	"	"	"	A6	" " " "

Volume control at maximum and output from signal generator as low as possible for all adjustments. Adjust dial pointer by rotating tuning condenser fully counter-clockwise (plates in full mesh). Dial pointer should be over max. cap. mark (Left) on dialback plate. Use insulated alignment screwdriver for adjusting trimmers.

PARTS LIST AND DESCRIPTIONS

CHASSIS—TOP VIEW



TUBES

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	INSTALLATION NOTES
		RCA PART No.	STANDARD REPLACEMENT	REPLACEMENT		
1	Converter	12SG7	12SG7	12J5GT	8BK	
2	Osc.	12J5GT	12J5GT	12SK7	6Q	
3	IF Amp.	12SK7	12SK7	12SQ7	8N	
4	2nd Det. - AVC - AF	12SQ7	12SQ7	35L6GT	8Q	
5	Power Output	35L6GT	35L6GT	35Z5GT	7AC	
6	Rectifier	35Z5GT	35Z5GT		6AD	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		RCA PART No.	MALLORY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.	CORNELL- DUBILIER PART No.	PRD3515	REPLACEMENT DATA		IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT										
7 (A) (B)	50 30	150 150	39152	2N520	DHN-2X50-150	TA-530	PRS150-40-40	BRD3515	Filter - Red	DT455	Filter - Green	
8	.05	400	70615	TP426	S-4-05	TC-15	484-.05	DT4P1	Line Filter	DT4P1	Line Isolating	
9	.1	400	70617	TP428	S-4-1	TC-1	484-.1	DT6S2	35L6 Plate	DT6S2	Tone Control	
10	.02	700	70711	TP412	S-6-02	TC-12	684-.02	DT6D2	Audio Coupling	DT6D2	"	
11	.0018	800	70712	TP405	S-6-002	TC-22	684-.002	DT6D5	Osc. Coupling	DT6D5	Osc. Coupling	
12	.005	600	70627	TP408	S-6-005	TC-25	684-.005	DT6S1	12SG7 Screen Bypass	DT6S1	12SG7 Screen Bypass	
13	.02	700	70711	TP412	S-6-02	TC-12	684-.02	DT6S4	AVC Filter	DT6S4	AVC Filter	
14	.01	1000	70652	TP410	S-6-01	TC-11	684-.01	DT6S1	Ant. Coupling	DT6S1	Ant. Coupling	
15	.01	1000	70652	TP410	S-6-01	TC-11	684-.01	12S5T4	12S5T4 Plate Bypass	12S5T4	12S5T4 Plate Bypass	
16	.035	600	70635	TP414	S-6-04	TC-14	684-.03					
17	.01	1000	70652	TP410	S-6-01	TC-11	684-.01					
18	330	500	39640	MC243	M0.5-34	1FM-34	1468-.0004					

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESIST- ANCE	WATTS	RCA PART No.	MALLORY PART No.	IRC PART No.	CLAROSTAT PART No.	
9(A)	500K Ω	1	36242	MR48*	DS13-133*	M-60-Z*	Install a 50K Ω resistor in series with the right hand terminal of the control and the lead connecting to the same terminal of the original control. (Control viewed from the shaft side, terminals down.) Attach to 19A per instructions.
(B)	Switch			Not Req.	M26T	47	SW-A6

RESISTORS

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA			IDENTIFICATION CODES
			RC PART No.	IRC PART No.	RC PART No.	
20	3300 Ω	30733	BTS-3300	Or.-Or.-Red	Mixer	Cathode
21	15 Meg.	38785	BTS-15 Neg.	Br.-Grn.-Blue	AVC	Network
22	22K Ω	30492	BTS-22K	Red-Red-Or.	Osc.	Grid
23	1500 Ω	30654	BTS-1500	Br.-Grn.-Red	Screen	Dropping
24	3.3 Meg.	12928	BTS-3.3 Meg.	Ur.-Or.-Grn.	AVC	Network
25	4.7 Meg.	30931	BTS-4.7 Meg.	Y1.-V1.-Grn.	1st AF	Grid.
26	220K Ω	14583	BTS-220K	Red-Red-Y1.	Plate	Load
27	120 Ω	30189	BW- $\frac{1}{2}$ -120	Br.-Red-Br.	Output	Cathode
28	470K Ω	30648	BTS-470K	Y1.-V1.-Y1.	Output	Grid
29	1200 Ω	6134	BTS-1200	Br.-Red-Red	Filter	
30	220K Ω	14583	BTS-220K	Red-Red-Y1.	Line	Isolating

PARTS LIST AND DESCRIPTIONS

CHASSIS—BOTTOM VIEW

TRANSFORMER (OUTPUT)

ITEM No.	RATING			REPLACEMENT DATA			INSTALLATION NOTES
	IMPEDANCE PRI. SEC.	DC. RES. PRI. SEC.	RCA PART No.	STANCOR PART No.	THORDARIN PART No.	UTAH PART No.	
31	2220Ω 3.4Ω	235Ω .86Ω	36800 (352605)	A3876*	T13S42*	87775*	*When using listed replacements disregard tapped primary which is used in conjunction with 1200Ω resistor for filtering purposes. Drill new mounting holes.

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			INSTALLATION NOTES
	FIELD FM	VC IMP.	RCA PART No.	JENSEN PART No.	UTAH PART No.		
32	7Ω	3.4Ω	70413	ST-4434	5PI*	Original Part No. 92510-1 *When using these units a suitable mounting bracket must be improvised to duplicate speaker position.	
	CONE DIA: 4½"	VC DIA: 2"					NOT REPLACEABLE - USE COMPLETE SPEAKER UNIT

R F COILS

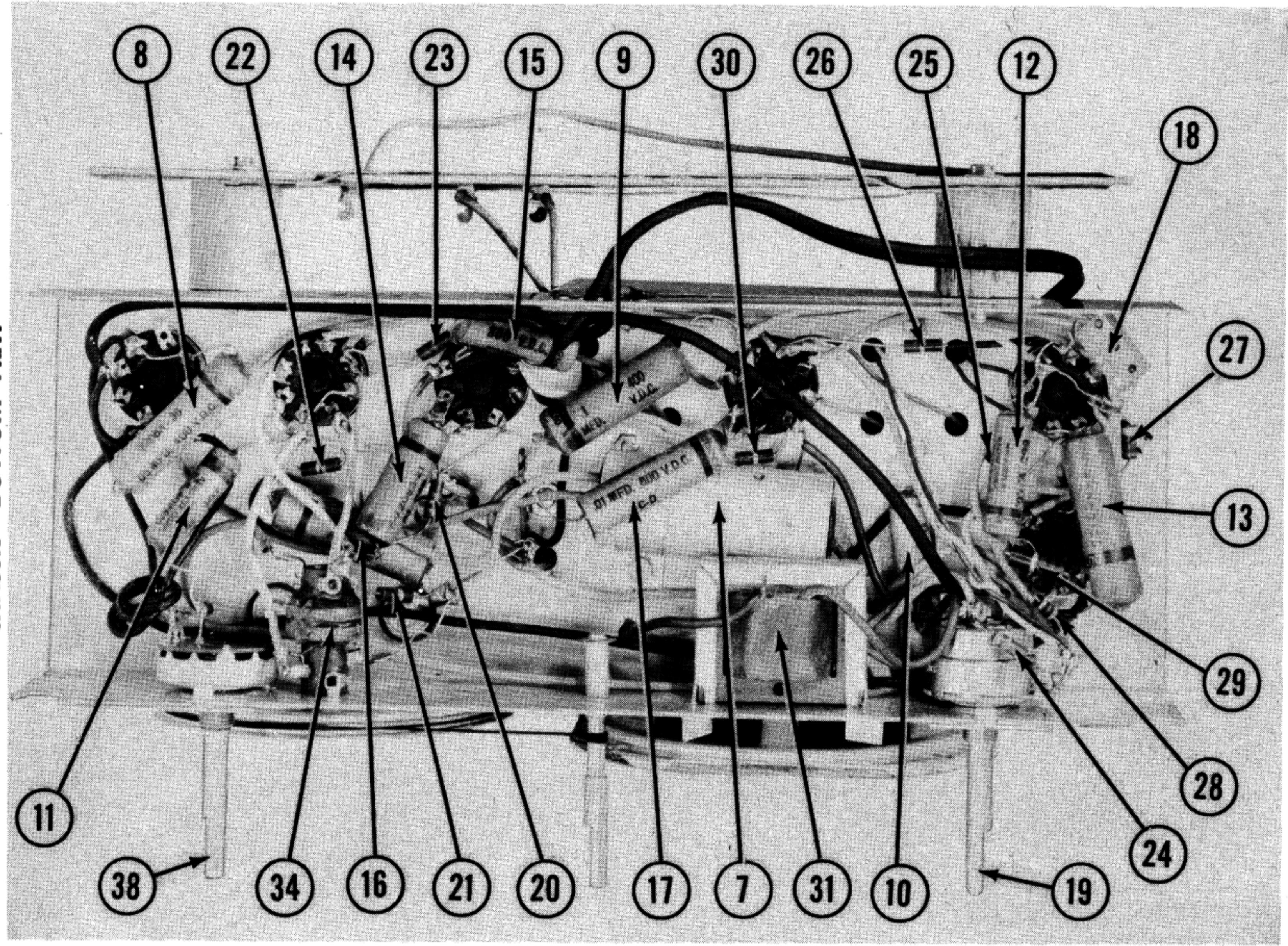
ITEM No.	USE	DC RES.		REPLACEMENT DATA			INSTALLATION NOTES
		PRI.	SEC.	RCA PART No.	WEISSNER PART No.		
33	Loop Ant.	0	1Ω	39821			
34	Osc.	2.5Ω	7Ω	39824			
35	Input IF	8Ω	8Ω	70411			Original Part No. 9222226-3
36	Output IF	15Ω	15Ω	70412			Original Part No. 9222226-4

DIAL LIGHT

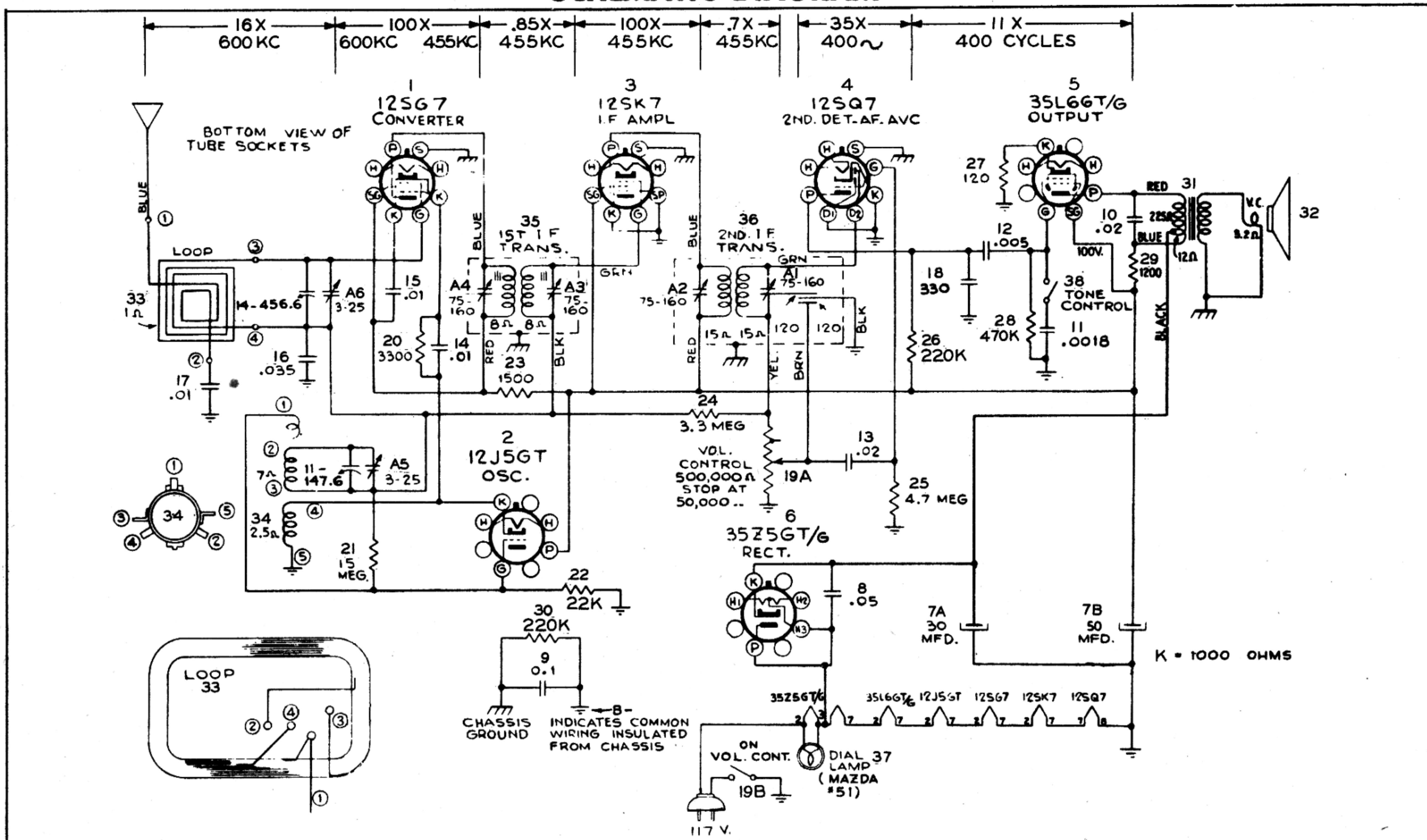
ITEM No.	BASE TYPE	VOLTS	AMPS.	REPLACEMENT DATA		INSTALLATION NOTES
				BEAD COLOR	RCA PART No.	
37	Min. Bayonet	6-8	0.2	White	11765	Type 51

MISCELLANEOUS

ITEM No.	PART NAME	RCA PART No.	NOTES
A5	Trimmer		3-25MMF Part of 36226
A6	Tun. Cap.	36226	2 Gang Main Tuning Cap {Ant. 14-45MMF Osc. 11-14MMF
38	Tone Switch Knob	36228 70414 36722	Ivory-for 56X2 Walnut-for 56X, 56X3

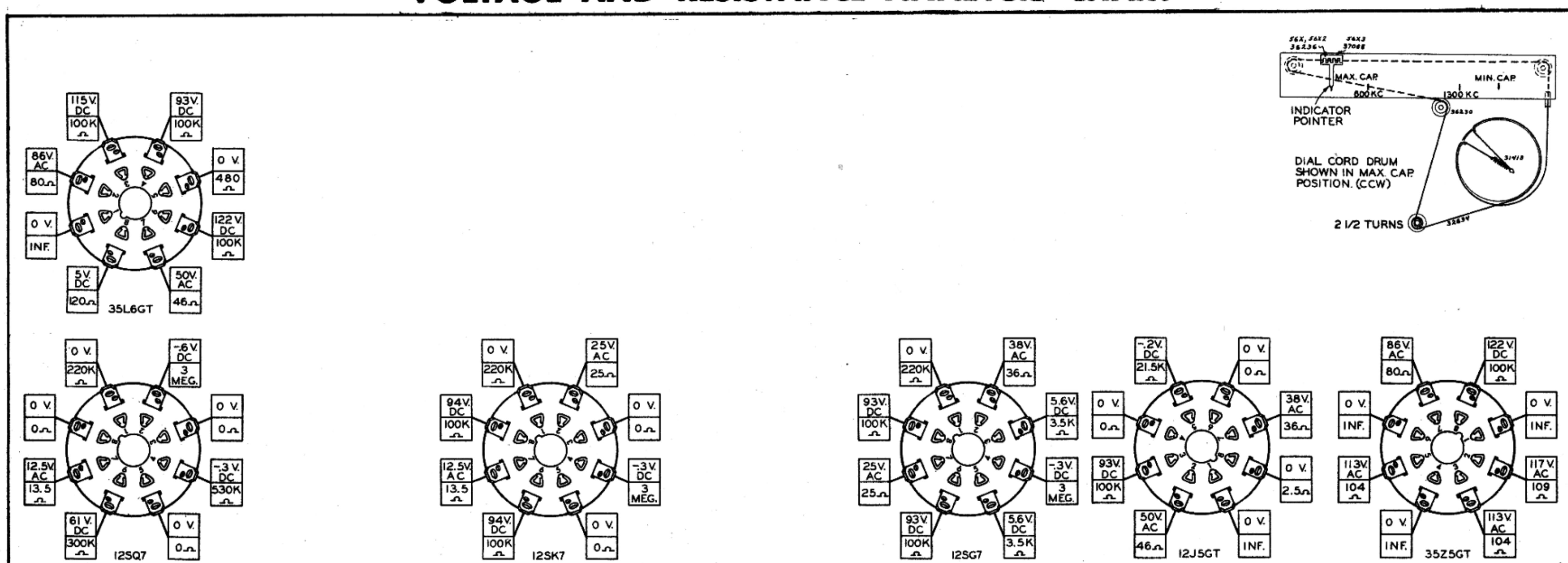


SCHEMATIC DIAGRAM



The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce so many variables into the measurement operation, such as, type of equipment used for measuring, handling and placement of probes, the accuracy of alignment, etc., that an absolute reading is impractical. AVC is made inoperative and 3-volt battery bias substituted for measurement.

VOLTAGE AND RESISTANCE ANALYSIS CHART



- 1 - DC Voltage measurements are at 20,000 ohms per volt: AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

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